ABSTRACT

Provided is a method for identifying or producing a molecule having antiviral activity against HIV. More particularly, provided is a method for identifying or producing a molecule that can inhibit the binding between HR1 and HR2 regions of HIV gp41, wherein complex formation is observed *in vitro* between a trimer with HR2 peptide in the presence of the molecule, and detected *in vitro* is the ability of the molecule to inhibit complex formation as an indicator of the antiviral activity of the molecule. The trimer is comprised of synthetic peptide comprising an amino acid sequence derived from the HR1 region of HIV-1 gp41 and further comprising one or more amino acid substitutions in a hydrophobic domain of the HR1 region of HIV which enable the synthetic peptide to self-assemble in solution into trimers.